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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/770,607	02/03/2004	Yun Chu	CP4001-AMP06552	1419

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EXAMINER
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SHARMA, SUJATHA R

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/770,607

Applicant(s)

CHU, YUN

Examiner

Sujatha Sharma

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Specification*

1. Claim 1 is objected to because of the following informalities:

In claim 1, line 4, "battery set; in at least" should read as --battery set in at least --.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Kashiwamura [US 2002/0016188].

Regarding claim 1, Kashiwamura discloses a wireless transceiver set. Kashiwamura further discloses:

- a multi-mode power supply device of a wireless earphone; See Fig. 6, and paragraph 62
- the earphone being communicable bi-directionally with portable communication devices wirelessly through an antenna; see figs. 1,2 and element 3a in fig. 6 and paragraphs 32, 34 and 61
- the earphone having a battery set in at least one side of the earphone; see paragraphs 13 and 44

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- an internal of the earphone having a power management circuit; see fig. 6, elements 70 and 71 and paragraph 62
- the battery set supplying power to the power management circuit; element 31 in Fig. 6
- the power management circuit being used to control the power on or off. See fig. 6 and paragraph 62

Regarding claim 2, Kashiwamura further discloses a method wherein the communication devices are selected from portable mobile phones and vehicle used phones. See Fig. 1 where a portable mobile phone is used.

Regarding claim 3, Kashiwamura further discloses a method wherein the battery set is a lithium battery set (see paragraph 14); and electric power is transferred from the battery set to the power management circuit for controlling the power output of the battery set (see paragraph 62).

Regarding claim 8, Kashiwamura further discloses a method wherein the power supply module is a chargeable battery. See paragraph 14

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-7,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Kashiwamura [US 2002/0016188] in view of Chen [US 6,839,448].

Regarding claim 4, Kashiwamura discloses all the limitations as claimed. Kashiwamura further discloses a method wherein the power supply module is electrically connected to the power management circuit..

However he does not disclose in particular a method wherein the power supply module is inserted into or buckled into one side of the earphone;

Chen, in the same field of invention, teaches an earpiece having detachable battery device. Chen further discloses a method wherein the power supply module is inserted into or buckled into one side of the earphone. See col. 2, line 35 – col. 3, line 5

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Chen to Kashiwamura so that the battery device maybe easily disengaged from the earpiece for charging purposes.

Regarding claim 5, Kashiwamura discloses all the limitations as claimed. Kashiwamura further discloses a method wherein the power supply module is electrically connected to the power management circuit.

However he does not disclose in particular a method wherein:

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- a suspender is capable of being inserted into or buckled into the groove of the earphone so that the suspender is positioned at one side of the power supply module;
- the suspender has a power supply module;

Chen, in the same field of endeavor, teaches method wherein:

- a suspender is capable of being inserted into or buckled into the groove of the earphone so that the suspender is positioned at one side of the power supply module; See figs. 1-6 and col. 2, line 35 – col. 3, line 23
- the suspender has a power supply module; see col. 2, line 35 – col. 3, line 23

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Chen to Kashiwamura so that the battery device maybe easily disengaged from the earpiece for charging purposes.

Regarding claim 6, Kashiwamura discloses all the limitations as claimed. Kashiwamura further discloses a method wherein the power supply module is electrically connected to the power management circuit.

However he does not disclose in particular a method wherein:

- one side of the earphone has a groove;
- the power supply module is installed in the suspender;
- one end of the suspender is inserted into the groove so as to position the suspender to the earphone

Chen, in the same field of endeavor, teaches method wherein:

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- one side of the earphone has a groove; see figs. 1-6, col. 2, lines 45-59
- the power supply module is installed in the suspender; See figs. 1-6 and col. 2, line 35 – col. 3, line 23
- one end of the suspender is inserted into the groove so as to position the suspender to the earphone See figs. 1-6 and col. 2, line 35 – col. 3, line 23

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Chen to Kashiwamura so that the battery device maybe easily disengaged from the earpiece for charging purposes.

Regarding claim 7, Kashiwamura discloses all the limitations as claimed. Kashiwamura further discloses a method wherein the power supply module is electrically connected to the power management circuit.

However he does not disclose in particular a method wherein:

- one side of the earphone has a groove;
- the power supply module is installed in the suspender;
- one end of the suspender is inserted into the groove so as to position the suspender to the earphone

Chen, in the same field of endeavor, teaches method wherein:

- one side of the earphone has a groove; see figs. 1-6, col. 2, lines 45-59
- the power supply module is installed in the suspender; See figs. 1-6 and col. 2, line 35 – col. 3, line 23

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- one end of the suspender is inserted into the groove so as to position the suspender to the earphone See figs. 1-6 and col. 2, line 35 – col. 3, line 23

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Chen to Kashiwamura so that the battery device maybe easily disengaged from the earpiece for charging purposes.

Regarding claim 9, Kashiwamura further discloses a method wherein the power supply module is a chargeable battery. See paragraph 14

5. Claims 10,11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kashiwamura [US 2002/0016188] in view of Hutchinson[US 6,472,846].

Regarding claims 10,11, Kashiwamura discloses all the limitations as claimed. However he does not disclose a method wherein the power management circuit has a check loop for preventing power from flowing along a reverse direction so as to protect the components within the earphone.

Hutchinson, in the same field of endeavor, teaches power control circuit applied to a portable audio equipment. Hutchinson further teaches the use of a Schotky diode in the power unit circuit as means of preventing reverse current to flow back to other parts. See col. 3, lines 23-37

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Hutchinson to Kashiwamura as means of preventing reverse current to flow back to other parts.



***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

Nassimi [US 2004/0204155] Non-rechargeable headset

Bae [US 6,868,284] Headset with retractable battery pack

Hahn [US 6,230,029] Modular wireless headset system

Huang [US 2004/0264720] Wireless earphone having replaceable battery module

Ma [US 7,046,799] Communication headset and method

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 571-272-7886. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

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like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sujatha Sharma  
October 10, 2006